

Appl. No. 10/501,164  
Amdt. dated Nov. 2, 2006  
Reply to Office action of Aug. 17, 2006

**REMARKS/ARGUMENTS**

Reconsideration of the present application as amended is respectfully requested.

Claims 1-10 remain in this application. Claims 5-10 have been added by the present Amendment.

In the Office action the Examiner noted that: (1) the file does not contain an Abstract on a separate sheet as required by 37 CFR 1.72(b), (2) the title is not descriptive, and (3) suggested guidelines for layout of the application are available for Applicants' use.

In response, with regard to (1) and (2), Applicants have submitted a Replacement Abstract on a separate sheet and the title of the application has been amended.

Applicant respectfully declines to provide section headings, as they are not required and submits that all mandatory requirements for layout of the application have been met. Please see MPEP §608.01(a).

In the Office action, the Examiner rejected Claims 1 and 2 under 35 U.S.C. §102(b) as being anticipated by

International Patent Publication No. WO 98/45872

(Wijenberg).

As herein amended Claim 1 recites an ionizable filling containing, in addition to Hg, a quantity of halide of Na, Ca and Tl and comprising  $\text{CaI}_2$  in a molar quantity which lies between 20 and 50% *of the total molar quantity of the halides of Na, Ca and Tl.*

Wijenberg is cited in the Office action as disclosing at lines 14-16 of page 3, lines 26-31 of page 4 and in the Abstract, an ionizable filling, which filling, in addition to Hg, contains a quantity of halide of Na, Ca, and Tl characterized in that the ionizable filling comprises  $\text{CaI}_2$  in a molar quantity which lies between 20 and 50% or between 25-35% of the total molar quantity of the halides.

Lines 14-16 of page 3 of Wijenberg read:

Fig. 1 shows a metal halide lamp provided with a discharge vessel 3 with a ceramic wall which encloses a discharge space 11 containing an ionizable filling which comprises besides Hg a molar quantity of halides of Na, Tl, and Dy. Two electrodes whose (sic)....

Lines 26-31 of page 4 of Wijenberg read:

In a practical realization of a lamp according to the invention as described with reference to the drawing, the rated lamp power is 70 W and the luminous efficacy is 88 lm/W. The

lamp, which is suitable for operation on an existing installation (retrofit lamp), has a lamp voltage of 91 V. The ionizable filling of the discharge vessel comprises 6 mg Hg, and 8 mg iodide salts as the molar quantity of halides of Na, Tl, Dy, Ho, Tm, and Ca having respective molar percentages of 29 %, 6.5 %, 6.5 %, 6.5 %, 6.5 % and 45 %. The Hg,...

The Abstract of Wijenberg reads:

The invention relates to a metal halide lamp which radiates light with a color temperature  $T_c$  of between 3900 K and 4200 K and with a general color rendering index  $R_a \geq 90$ . The ionizable metal halide filling comprises between 30 and 50 mole %  $CaI_2$ . A lamp can be realized thereby having a limited crest factor, and accordingly a long useful life.

As can be seen from the above, the molar quantity of  $CaI_2$  disclosed in Wijenberg is 45% in a mixture in which halides of sodium, calcium and thallium are 29%, 6.5% and 45% respectively. Thus, the molar quantity of  $CaI_2$  in the lamp of Wijenberg is 55.9% of the *total molar quantity* of the quantity of *sodium, calcium and thallium halides*, not between 20 and 50% of said total molar quantity of the halides of Na, Ca and Tl, as recited in Claim 1 or between 25 and 35% of the total molar quantity of the halides of Na, Ca and Tl as recited in Claim 2 or below 30% of the total molar quantity of the halides of Na, Ca and Tl as recited in new Claim 5.

Wijenberg cannot, moreover, be said to suggest the present invention. Wijenberg is directed to a lamp which realizes a reduced crest factor and, as a result of the favorable crest factor, a long useful life (page 2, lines 4-12). The crest factor decreases as the mole percentage of  $\text{CaI}_2$  increases, as explained at page 2, lines 16-25 of Wijenberg. In stark contrast, the present invention teaches that the maintenance of metal halide lamps is advantageously improved by decreasing the amount of  $\text{CaI}_2$ , i.e. by selecting a substantially lower molar percentage of Ca iodide (page 4, lines 30-32). Wijenberg thus teaches away from the present invention.

Hence, Wijenberg does not teach or suggest  $\text{CaI}_2$  in a molar quantity which lies between 20 and 50% of said total molar quantity of the halides of Na, Ca and Tl, as recited in Claim 1 or between 25 and 35% of the total molar quantity of the halides of Na, Ca and Tl as recited in Claim 2 or below 30% of the total molar quantity of the halides of Na, Ca and Tl as recited in new Claim 5.

Applicants respectfully submit that Claims 1, 2 and 5 are patentable and that Claims 2-6, which depend from Claim 1, are patentable at least based on their dependency.

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In the Office action, the Examiner rejected Claims 3-4 under 35 U.S.C. §103(a) as being unpatentable over Wijenberg as applied to Claim 1 and further in view of International Publication no. WO/99/53523 (Suijker).

Applicants respectfully submit that Claims 3-4 are patentable at least based on their dependency on Claim 1.

Claims 5-10 are added in order to provide Applicants with protection commensurate in scope with the invention disclosed.

Applicants respectfully submit, in particular, that new Claims 10 and 6 contain patentable subject matter. Wijenburg is directed to realizing a color temperature of 3900 to 4500 K (page 2, lines 7-8) in a kind of lamp with a color temperature typically between 2600 and 4000 K (page 1, line 10). In stark contrast, the present invention realizes a substantially lower color temperature of up to 3500 K, as disclosed in the specification at page 2, line 19-20 and recited in Claims 10 and 6.

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In addition, in order to put those Claims in better (U.S.) form, Claim 1 has been amended by removing the reference numerals, and Claims 2-4 amended by changing "characterized in that" to "wherein."

In view of the above, it is respectfully submitted that Claims 1-10 are patentable and that the present application is in condition for allowance. A Notice of Allowance is earnestly solicited.

If any informalities remain, the Examiner is requested to telephone the undersigned in order to expedite allowance.

Please charge any fee deficiencies and credit any overpayments to Deposit Account No. 14-1270.

Respectfully submitted,

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